



DEMPO CHARITIES TRUST's
Dhempe College of Arts and Science, Panaji-Goa
DEPARTMENT OF BIOTECHNOLOGY

Report on 5-day State level Hands-on Training workshop on Bioinformatics

8th-12th January 2024

A 5-day Hands-on Training workshop on Bioinformatics was organized by the Department of Biotechnology at Dhempe College of Arts and Science, in association with make-Intern and E-Cell, IIT Kharagpur, supported by the Star College Scheme, Department of Biotechnology, Government of India from 8th – 12th January 2024. The brochure of the same was shared with other colleges across the state.

The workshop began with an inaugural ceremony on 8th January amidst the presence of esteemed dignitaries Dr. Sushil Kumar Middha, the Resource Person, Prof. Vrinda Borkar, Principal, Dr. Swati Pawar (Vice Principal), Mrs. Mrunal Phadke (Department In-Charge). A total of 42 enthusiastic students along with faculty members of the biotechnology department were also present. Principal, Prof. Vrinda Borker, explained the significance of hands-on skill training for the students for better job and research prospects. This diverse gathering set the stage for a collaborative and insightful learning experience for the participants.

The workshop provided a comprehensive exploration of bioinformatics, emphasizing computational techniques, database analysis, and software tools. Attendees gained practical insights into applying tools of bioinformatics to decipher biological data, aiming to equip them with essential skills for navigating this dynamic intersection of biology and information technology.

Participants engaged in in-depth technical sessions covering a myriad of topics, including the Human Genome Project, Databases and renowned repositories such as GenBank, NCBI, UniProt, EMBL, EBI, PUBMED, DRUG BANK, SWISS PROT, PROSITE etc.

Concepts of high-end genome sequencing techniques, Metagenomics by Nanopore technology, Data Curation, & in-silico drug designing were explored in detail. Participants were also trained in various tools for data analysis including KEGG-KASS, and Diamond BLAST, for sequence comparison, alignment, scoring matrices, substitution matrices like BLOSUM and PAM, dynamic programming, and protein databases management, MEGA, SeQUIN etc.

On day 5 of the workshop, a time-bound assessment of students was carried out via the circulation of a Google questionnaire as part of the Zonal Championship. Based on the scores & interaction throughout the training, the top 5 students were awarded special certificates and will now stand a chance to compete at the National level championship to be held at IIT, later during this year.

Overall, the workshop provided participants with an extensive understanding of bioinformatics tools and methodologies, preparing them for the challenges and opportunities in this dynamic field. The 5-day Hands-on Training workshop on Bioinformatics concluded with a vibrant valedictory ceremony and distribution of certificates to the participants, marking the culmination of an enriching week.



Total no: of beneficiaries: 42

Males: 06 Females: 36

Dr. Amara Begum Mulla

(Faculty Coordinator for the workshop)

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